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RETEST EXAMINATION - 2019

Semester : 2nd (Old & New)

Subject Code : Sc-203

CHEMISTRY - II

Full Marks - 70

Time - Three hours

The figures in the margin indicate full marks
for the questions.

Instructions :

1. Questions on PART-A are compulsory.
2. Answer any *five* questions from PART-B.

PART - A

Marks - 25

1. Fill in the blanks : 1×10=10
 - (a) Carboxy hemoglobin is caused due to inhalation of _____.
 - (b) Ozone layer protect the earth from _____ radiation.
 - (c) To remove acidic gangue, _____ flux is used.

[Turn over

- (d) Froth floatation method is useful for _____ ore concentration.
- (e) Gasoline contains _____ hydrocarbon than those of kerosene.
- (f) For manufacturing of Portland cement _____ kiln is used.
- (g) A high aniline point indicates the presence of high amount _____ hydrocarbons.
- (h) Linear polymers are formed by _____ polymerization.
- (i) Urea was first synthesized in laboratory by _____.
- (j) In I.U.P.A.C system alcohols are named as _____.
2. Write true or false of the following :
 $1 \times 10 = 10$
- (a) Determination of C.O.D takes more time than that of B.O.D.
- (b) Hydrocarbons are greenhouse gases.



3. Choose the correct answer of the following :
 $1 \times 5 = 5$
- (a) Carbon dioxide is
- (i) the chief component of air
- (ii) a greenhouse gas
- (iii) an elementary gas
- (iv) a poisonous gas
- (c) Coal is a primary but coke is secondary fuel.
- (d) White cement contains no calcium.
- (e) A lubricant can also act as a cooling agent.
- (f) Polystyrene is a thermosetting resin.
- (g) There is no compound named as pentene-3.
- (h) Carboxylic acid and aldehydes are isomeric.
- (i) Halogenations of alkanes are substitutions reactions.
- (j) Calcination is used in case of carbonate ores.

(b) SiO_2 is a

- (i) acidic flux
- (ii) basic flux
- (iii) reducing agent
- (iv) organic compound

(c) Octane No. is used to determine the quality of

- (i) kerosene
- (ii) diesel
- (iii) petrol
- (iv) naphtha

(d) Polythene is

- (i) an addition polymer
- (ii) a condensation polymer
- (iii) a branched polymer
- (iv) a thermosetting polymer.

(e) The first member of alkenes homologous series is

- (i) methene
- (ii) ethene
- (iii) acetylene
- (iv) methanal.



PART - B

Marks - 45

4. (a) What are primary and secondary pollutants? Give examples. 3

(b) Mention the ill effects of acid rain. 3

(c) Suggest few ways to control soil pollution. 3

5. (a) Give the principle of Froth floatation method of concentration. 2

(b) Differentiate between Roasting and Calcination. 3

(c) Write the chemical reactions involved in the manufacturing of cast iron in blast furnace. 4

6. (a) Give the differences between Ore and Mineral of metals. 2

(b) What are fluxes? Give examples of acidic and basic fluxes. 3

(c) Mention the advantages of Open hearth process over Bessemer process. 4

7. (a) Give the average composition of Portland cement. 3
- (b) What is special cement? 2
- (c) How is Portland cement manufactured in Wet process? Give your answer with flow chart. 4
8. (a) Define lubricant. 2
- (b) Mention the various functions of lubricant. 3
- (c) Name the properties which are considered for selecting a lubricant. 4
9. (a) Define metallic corrosion. 2
- (b) Explain the mechanism of Rusting. 3
- (c) How metallic corrosion can be controlled? 4
10. (a) What is polymerization? Give the classification of polymerization. 1+2=3
- (b) Name the monomers of natural rubber and PVC. 2
- (c) Write the differences of thermoplastic and thermosetting plastic (resin). 4

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11. (a) What are hydrocarbons? Classify hydrocarbons with examples. 2+2=4
- (b) Write the structure and names of the isomers of C_5H_{10} . 3
- (c) How is methane prepared in laboratory? 2
12. (a) Give one example of each of addition, elimination and substitution reaction. 3
- (b) What happens when alkyl halides are treated with aqueous KOH and alcoholic KOH? 2+2=4
- (c) What are aromatic hydrocarbons? 2

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